

material used to make medication capsules. Outside the protective shell 10 is a layer of compound sensitive polymer 8 which can contract in the presence of a target compound. When the concentration of the target compound (such as an odor) reaches a predetermined threshold, the pressure caused by the contraction of the polymer either ruptures the shell 10 or causes the active agent to exit an orifice or weak point in the shell 9. While the presence of such a weak point is optional, it is useful in that it can be adjusted to change the rupture or concentration threshold.

It is to be understood that the above-described arrangements are merely illustrative of the application of the principles of the invention, and that other arrangements may be devised by those skilled in the art without departing from the spirit and scope of the invention.

I claim:

1. An apparatus for the release of an active fluid agent comprising:

a reservoir of active agent;

a compound selective polymer in proximity to said reservoir;

a release orifice in said reservoir, said compound selective polymer experiencing a change of shape upon detection of a target compound, said change of shape exerting pressure on said reservoir causing said active agent to exit said reservoir through said release orifice.

2. The apparatus of claim 1 wherein said change of shape is an expansion.

3. The apparatus of claim 1 wherein said change of shape is a contraction.

4. The apparatus of claim 1 wherein said compound selective polymer is a polystyrene.

5. The apparatus of claim 1 wherein said compound selective polymer is a polyalphamethylstyrene.

6. An apparatus for the release of an active fluid agent comprising:

means for holding a quantity of an active fluid agent;

means for releasing said active fluid agent into a surrounding environment upon detection of presence of a predetermined target compound, said means for releasing comprising a com-

pound selective polymer.

7. The apparatus of claim 6 wherein said means for releasing said active fluid agent further comprises an orifice.

8. The apparatus of claim 6 wherein said means for releasing said active fluid agent is a polystyrene.

9. The apparatus of claim 6 wherein said means for releasing said active fluid agent is a polyalphanethylstyrene.

10. A method for releasing a an active fluid agent into an environment upon detection of a target compound comprising the steps of:

storing an active fluid agent in polymer reservoir;

said polymer reservoir expanding or contracting in a presence of a target compound;

said expansion or contraction expelling a portion of said active fluid agent into said environment.

11. The method of claim 10 wherein said polymer is a polystyrene.

12. The method of claim 10 wherein said polymer is a polyalpha-

methylstyrene.

13. The method of claim 10 wherein said active agent is a perfume compound.

14. An apparatus for releasing a sweet smelling compound into  
5 surrounding air in a room where odors are generated comprising a  
reservoir containing a volume of the sweet smelling compound, the  
reservoir being made from a special polymer which detects certain  
order causing compounds and contracts or expands in their pres-  
ence, this contraction or expansion pushing the sweet smelling  
compound out of a small hole in the reservoir when the one of the  
10 odder causing compounds is present.

15. The apparatus of claim 14 where the sweet smelling compound  
is a perfume.

16. The apparatus of claim 15 where the special polymer is a  
15 polystyrene.

17. The apparatus of claim 15 where the special polymer is a  
polyalphamethylstyrene.